

# MONTHLY WEATHER REVIEW,

## NOVEMBER, 1876.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

### INTRODUCTION.

In compiling the present Review, use has been made of the meteorological data reported from 424 stations, classified as Voluntary Observers, Army Post and Signal Service Stations. But few prominent features are noticeable in the meteorology of the month; an excess of rain is reported from the Upper Lake region, New England and the Middle Atlantic States, with temperatures decidedly above the average, being, in some portions, the warmest November recorded for forty years. Remarkable storms have not occurred within the United States, but severe gales and hurricanes seem to have prevailed over the North Atlantic.

### BAROMETRIC PRESSURE.

*In General.*—The barometric pressure is shown, as usual, by the isobars on Map No. II. The area of highest average pressure is there shown to be central in the Lower Mississippi valley, while the average is almost equally high at Pembina. The lowest isobar, 29.90, passes northeastward through Nova Scotia and Cape Breton. As compared with the previous month the pressure has risen decidedly in the Lake region, the Southwest and southern Florida. As compared with November, 1875, the barometer has been higher in the Southwest and Northeast, but lower in the Lakes, Ohio valley and Middle States. As compared with November, 1874, the pressure has been very generally lower, and especially so in the Middle and Eastern States. As compared with November, 1873, the pressure has been lower in New England and probably the Canadian provinces.

*Areas of High Barometer.*—The principal areas of high barometer have been as follows: No. I.—On the 2nd the pressure rose in the Southwest with northerly gales, and the central highest barometer continued thereafter slowly moving northeastward, reaching Ohio on the afternoon of the 4th, and New Hampshire by 11 p. m. of the 5th, finally disappearing on the 6th over the Gulf of St. Lawrence and Cape Breton, where the pressure remained very high during the 7th, having been reinforced by colder air from the North and East.

No. II.—Central on the 7th in Texas, having moved thither during the 6th, whence it moved slowly eastward, reaching Georgia on the 10th and remaining in Georgia and Florida until the 13th.

No. III.—Advanced on the 12th southward from Manitoba, and was, 11 p. m. of the 13th, apparently central over eastern Dakota, by which time, also, northerly gales had begun on the Texas coast. By the morning of the 15th the remaining small area of high pressure was central in Indian Territory, and by the morning of the 16th, an additional flow of air southward over the Lakes seems to have given rise to a ridge of high pressure, extending from Texas northeastward over the St. Lawrence valley. The barometer continued high over Canada and New England until the 20th.

No. IV.—The northerly winds following low barometers Nos. VIII and IX had, by 11 p. m. of the 17th, extended southward to Kansas, and to the Texas coast by the 18th, at 4:35 p. m. On the morning of the 19th a ridge of high pressure extended from Manitoba to Texas, which, by 4:35 p. m., had contracted to a small area, central in Arkansas, whence it moved eastward over the Gulf States, separating the areas of low pressure Nos. IX and X.

No. V.—The cold northerly winds following low barometer No. X had, by midnight of the 21st, extended southward over the Texas coast, and the succeeding area of highest pressure extended, at 11 p. m. of the 22d, over Arkansas and the lower Missouri valley, and, on the morning of the 23d, was confined to Arkansas, whence it extended eastward, being, on the morning of the 24th, central in eastern Tennessee, after which, however, being reinforced from the west, the highest pressure remained in Texas.